

### Claims

1. Method for boosting data transmission in a telecommunications system including at least one fixed station (BTS), pieces of terminal equipment (MS), which over a first transmission path are in connection with the fixed station, at least one transcoder unit (TRAU) on the telecommunications network side and a second transmission path between the fixed station (BTS) and the transcoder unit (TRAU), which telecommunications system on the first transmission path uses a first speech coding method, which is a low transmission rate speech coding, characterized in that in the method at least on a part of the second transmission path a second speech coding method is used, which is speech coding at a lower transmission rate than the first speech coding, and the speech parameters received from the terminal equipment for transmission onto the second transmission path are converted into speech parameters of the second speech coding method and the speech parameters to be transmitted to the terminal equipment on the first transmission path are converted into speech parameters of the first speech coding method.
2. Method as defined in claim 1, characterized in that in connection with the fixed station (BTS) the speech parameters to be transmitted onto the second transmission path are converted into speech parameters of the second speech coding method and the speech parameters received from the second transmission path are converted into speech parameters of the first speech coding method.
3. Method as defined in claim 2, characterized in that the speech parameters to be transmitted onto the second transmission path are converted into speech parameters of the second speech coding method and the speech parameters received from the second transmission path are converted for the transmission rate of the first speech coding method.
4. Method for boosting data transmission in a mobile communications system including at least one base transceiver station (BTS), at least one transcoder unit (TRAU) on the mobile communications network side, a transmission path between these and mobile stations (MS) which over the radio path are in connection with the base transceiver station, which mobile communications system on the radio path uses a first speech

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coding method, which is a low transmission rate speech coding,  
characterized in that in the method

at least on a part of the transmission path a speech coding  
method is used which is speech coding at a lower transmission rate than the  
5 first speech coding, and

the speech parameters received from the mobile station for  
transmission onto the transmission path are converted into speech  
parameters of the second speech coding method and the speech  
parameters to be transmitted to the mobile station on the radio path are  
10 converted into speech parameters of the first speech coding method.

5. Method as defined in claim 4, characterized in that the  
speech parameters to be transmitted onto the transmission path are  
converted into speech parameters of the second speech coding method and  
the speech parameters received from the transmission path are converted  
15 for a transmission rate of the first speech coding method.

6. Arrangement for boosting data transmission in a  
telecommunications system including at least one fixed station (BTS), pieces  
of terminal equipment (MS), which over a first transmission path are in  
connection with the fixed station, at least one transcoder unit (TRAU) on the  
20 telecommunications network side and a second transmission path between  
the fixed station (BTS) and the transcoder unit (TRAU), which  
telecommunications system on the first transmission path uses a first speech  
coding method, which is speech coding at a low transmission rate,

characterized in that the arrangement includes in a  
25 telecommunications network

at least one first speech coder for converting speech parameters  
to be transmitted between the first and the second speech coding method,  
which second speech coding method is used on the said transmission path  
on the transmission connection between the speech coder and the  
30 transcoder unit and it is speech coding at a lower transmission rate than the  
first speech coding.

7. Arrangement as defined in claim 6, characterized in  
that the first speech coder is located in connection with the fixed station  
(BTS).

35 8. Arrangement as defined in claim 6, characterized in  
that the arrangement includes in a telecommunications network

- at least one second speech coder for converting speech parameters to be transmitted from one speech coding method into the second method so that the second speech coding method is used on the said transmission path on the transmission connection between the first
- 5 speech coder and the second speech coder.

9. Arrangement as defined in claim 8, characterized in that the second speech coder is located in connection with the transcoder unit (TRAU).

10. Mobile communications system including at least one base transceiver station (BTS), at least one transcoder unit (TRAU) on the mobile communications network side, a transmission path between these and mobile stations (MS), which over the radio path are in connection with the base transceiver station, which mobile communications system on the radio path uses a first speech coding method, which is a low transmission rate
- 15 speech coding, characterized in that the mobile communications system includes

- at least one first speech coder for converting speech parameters to be transmitted between a first and a second speech coding method, which second speech coding method is used on the said transmission path on the
- 20 transmission connection between the speech coder and the transcoder unit and it is speech coding of a lower transmission rate than the first speech coding.

11. Mobile communications system as defined in claim 10, characterized in that the first speech coder is located in
- 25 connection with the base transceiver station (BTS).

12. Mobile communications system as defined in claim 10, characterized in that the mobile communications system includes in a mobile communications network

- at least one second speech coder for converting speech parameters to be transmitted from one speech coding method into a second method so that the second speech coding method is used on the said transmission path on the transmission connection between the first speech coder and the second speech coder.
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13. Mobile communications system as defined in claim 12, characterized in that the second speech coder is located in connection with the transcoder unit (TRAU).
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